

Project :  
Created By :

## Customer Input

Selected Model / Type : UAM100C3F / Fixed Speed Scroll Chiller Version C  
Ambient Temperature : 35.0 °C Frequency : 50 Hz  
Chilled Water : EWT 11.00 °C Voltage : 380-415 V  
LWT 6.00 °C Country of Origin : Malaysia

## Generated Outputs

| Full Load Performance |   | Nominal Data (AHRI Standard) |       | Input Conditions |                   |
|-----------------------|---|------------------------------|-------|------------------|-------------------|
| Cooling Capacity      | : |                              | 100.0 | 98.82            | TR                |
|                       |   |                              | 351.7 | 347.6            | kW                |
| Current               | : | Compressor                   | 201   | 201              | A                 |
|                       |   | Fan                          | 24    | 24               | A                 |
|                       |   | Total                        | 225   | 225              | A                 |
| Power Input           | : | Compressor                   | 116.4 | 116.3            | kW                |
|                       |   | Fan                          | 16.00 | 16.00            | kW                |
|                       |   | Total                        | 132.4 | 132.3            | kW                |
| COP                   | : |                              | 2.656 | 2.627            | kW/kW             |
| Flow Rate             | : |                              | 60.56 | 59.85            | m <sup>3</sup> /h |
| Pressure Drop         | : |                              | 63.0  | 61.8             | kPa               |

Note :  
1. Nominal data is based on the AHRI (551/591) standard condition of EWT/LWT of 12.00/7.00°C, and ambient temperature of 35.0°C.  
2. Input Condition data is based on customer's input condition of EWT/LWT , and ambient temperature.  
3. Evaporator rating fouling factor = 0.018 m<sup>2</sup>.K/kW, and rating altitude at 0 m.

## Part Load Performance

|                        |   |       |       |       |       |       |       |   |   |                   |
|------------------------|---|-------|-------|-------|-------|-------|-------|---|---|-------------------|
| IPLV                   | : | 4.056 |       |       |       |       |       |   |   | kW/kW             |
| Point                  | : | 1     | 2     | 2     | 3     | 3     | 4     | - | - | -                 |
| Corresponding Capacity | : | 100.0 | 82.7  | 65.4  | 54.7  | 35.9  | 29.0  | - | - | -                 |
| Total Cooling Capacity | : | 100.0 | 82.70 | 65.40 | 54.74 | 35.92 | 28.99 | - | - | TR                |
| Total Cooling Capacity | : | 351.7 | 290.9 | 230.0 | 192.5 | 126.3 | 102.0 | - | - | kW                |
| Total Power Input      | : | 132.4 | 83.16 | 62.74 | 45.58 | 26.82 | 20.88 | - | - | kW                |
| Total Current          | : | 225   | 148   | 111   | 85    | 50    | 40    | - | - | A                 |
| COP                    | : | 2.656 | 3.497 | 3.666 | 4.223 | 4.710 | 4.883 | - | - | kW/kW             |
| Ambient Temperature    | : | 35.0  | 27.0  | 27.0  | 19.0  | 19.0  | 13.0  | - | - | °C                |
| EEWT                   | : | 12.00 | 11.14 | 10.27 | 9.74  | 8.80  | 8.45  | - | - | °C                |
| ELWT                   | : | 7.00  | 7.00  | 7.00  | 7.00  | 7.00  | 7.00  | - | - | °C                |
| Flow Rate              | : | 60.56 | 60.56 | 60.56 | 60.56 | 60.56 | 60.56 | - | - | m <sup>3</sup> /h |
| Pressure Drop          | : | 63.0  | 63.0  | 63.0  | 63.0  | 63.0  | 63.0  | - | - | kPa               |

## Others

|                            |   |            |                    |  |  |  |  |  |           |   |
|----------------------------|---|------------|--------------------|--|--|--|--|--|-----------|---|
| MCA                        | : | 282        |                    |  |  |  |  |  |           | A |
| No. of Refrigerant Circuit | : | 2          |                    |  |  |  |  |  |           | - |
| Refrigerant Type           | : | R410A      |                    |  |  |  |  |  |           | - |
| Refrigerant Charge         | : | System 1/2 | 35.0 / 35.0        |  |  |  |  |  | kg/System |   |
| Chiller Dimension          | : | W / D / H  | 2237 / 4163 / 2156 |  |  |  |  |  | mm        |   |
| Weight                     | : | Shipping   | 3048               |  |  |  |  |  | kg        |   |
|                            | : | Operating  | 3239               |  |  |  |  |  | kg        |   |

## Evaporator

|                       |   |                    |               |  |  |  |  |  |                   |   |
|-----------------------|---|--------------------|---------------|--|--|--|--|--|-------------------|---|
| Type                  | : | S&T                |               |  |  |  |  |  |                   | - |
| Inlet/Outlet Diameter | : | 5" Victaulic Joint |               |  |  |  |  |  |                   | - |
| Flow Rate             | : | Min / Max          | 16.40 / 70.40 |  |  |  |  |  | m <sup>3</sup> /h |   |
| Pressure Drop         | : | Min / Max          | 7.00 / 79.0   |  |  |  |  |  | kPa               |   |

## Compressor

|            |   |            |                          |  |  |  |  |  |          |  |
|------------|---|------------|--------------------------|--|--|--|--|--|----------|--|
| Quantity   | : | System 1/2 | 2 / 2                    |  |  |  |  |  | -        |  |
| Type       | : |            | Hermetic-sealed (Scroll) |  |  |  |  |  | -        |  |
| Oil Charge | : | System 1/2 | 13.4 / 13.4              |  |  |  |  |  | L/System |  |

## Condenser

|                     |   |      |                |  |  |  |  |  |                      |  |
|---------------------|---|------|----------------|--|--|--|--|--|----------------------|--|
| Coil                | : |      |                |  |  |  |  |  |                      |  |
| Tube                | : | Type | Copper         |  |  |  |  |  | -                    |  |
| Fin                 | : | Type | Aluminium      |  |  |  |  |  | -                    |  |
| Surface Area/ Coil  | : |      | 15.36          |  |  |  |  |  | m <sup>2</sup> /Coil |  |
| Fan                 | : |      |                |  |  |  |  |  |                      |  |
| Type/ Drive         | : |      | Axial / Direct |  |  |  |  |  | -                    |  |
| Quantity per System | : |      | 4              |  |  |  |  |  | -                    |  |

Certified in accordance with the AHRI Air-Cooled Water-Chilling Packages Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified Units may be found in the AHRI Directory at [www.ahridirectory.org](http://www.ahridirectory.org)

